Investigating the Relationship between Personality Traits and Self-Control and Nicotine Dependence Symptoms in Male Prisoners in Kerman, Iran

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Short Communication

Abstract

Background: Smoking is the most common and cheapest addictive substance and has physical, psychological, and social side effects. Personality traits and low self-control have been identified as key factors for substance and tobacco abuse. This study examined the relationship between personality traits and self-control, and symptoms of nicotine dependence in male prisoners.

Methods: This was a descriptive correlational study. The research sample consisted of 384 male prisoners in Kerman, Iran. The participants were selected using simple random sampling method. The data collection tools consisted of the NEO five factor personality inventory (NEO-FFI), self-control Inventory, and the nicotine dependence symptoms inventory.

Findings: The mean age of the prisoners was 35.33 ± 9.28 year. The results showed a significant negative relationship between self-control and nicotine dependence. The most important predictors of prisoners' self-control were the personality traits of conscientiousness, neuroticism, openness, and temperamental neuroticism, respectively. The most important predictors of nicotine dependence in prisons were personality traits of adaptability, temperamental neuroticism, extroversion, and openness, respectively.

Conclusion: Personality traits and self-control have an important role in nicotine dependence; therefore, by training self-control, behaviors such as smoking and consumption of drugs can be reduced.

Keywords: Personality traits, Self-control, Nicotine dependence, Prisoners

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Introduction

Smoking is a global issue and a detrimental phenomena for the health of the individual and the society.[1] Studies have shown that smoking is the most important health problem in many countries and one of the most prevalent preventable causes of death in developed countries.[2] Previous studies have indicated a range of factors such as individual factors, including mental health, personality traits,[3] and self-control,[4] are involved in the development of nicotine dependence and smoking. Researches have suggested that smoking is associated with personality traits such as extraversion, impulsivity, risk-taking,[5] modernistic enthusiasm, avoiding monotony, and antisocial personality.[6] According to the general theory of crime, individual differences in self-control are associated with some behaviors such as alcohol consumption, smoking, marital instability, and injuries in adults. In this theory, the relationship between low self-control and potential criminal behavior and risky behavior has been emphasized.[7]

Many studies have reported the role of low self-control in risky behaviors and drug use. They have suggested that people who have less self-control have more exposure to risky behaviors such as driving under the influence of alcohol, driving fast, searching for danger and new experiences, and smoking.[8] Swadi has noted low self-control as a key factor for substance abuse in young people.[9] With regards to the importance of self-control, and the effect of personality traits on drug and tobacco consumptions, the purpose of this study was to investigate the relationship of personality traits and self-control with nicotine dependence among prisoners.

Methods

This was a descriptive correlational study. The research population consisted of all male prisoners in Kerman, Iran, in 2012. The sample size was 384 participants which was determined according to Cochran's formula. Simple random sampling method was used. In addition, the data collection tools consisted of the nicotine dependence symptoms inventory, NEO five factor personality inventory (NEO-FFI), and the self-control inventory.

The nicotine dependence symptoms inventory was developed by Shiffman et al.[10] It was prepared according to the dependence syndrome criteria of the third edition, diagnostic and statistical manual of mental disorders (DSM-III) and DSM-IV. This scale consists of 19 items. The validity of the questionnaire was approved by 10 faculty members. The reliability was determined by Cronbach's alpha ($\alpha = 0.84$).

The NEO-FFI was made by McCrae and Costa.[11] It contains 60 questions. It is used to assess the five main personality traits (extroversion, adaptability, conscientiousness, temperamental, and openness to experience). The short form of this questionnaire has been validated in different countries including Iran.[12]

The self-control inventory contains 36 items scored based on a 5-point likert scale (1 = is not similar to me, 2 = slightly similar, 3 = somewhat similar, 4 = is very similar, and 5 = very much similar). Its creator has reported its validity to be acceptable and appropriate. Its validity and reliability has also been reported as acceptable in Iran.[8]

Data analysis was conducted using SPSS software (version 20, SPSS Inc., Chicago, IL, USA), multivariate regression analysis, and Pearson's correlation coefficient.

Results

Data analysis showed that the mean age of the prisoners was 35.33 ± 9.28 year. Among the participants, 142 (37.0%) were unemployed and 242 (63.0%) were employed. Among those employed, 46 (12.0%) were employees, 180 (46.9%) were self-employed, and 158 (41.1%) were workers. Moreover, 23 (6.0%) were illiterate, and the education level of 94 (24.5%) participants was lower than diploma, 214 (55.7%) had diploma, 37 (7.0%) had advanced diploma, and 16 (4.1%) had a bachelor's degree. Pearson's correlation coefficient showed that there was a significant negative relationship between nicotine dependence and self-control of the prisoners ($r = -0.305$, $P < 0.001$). Multivariate regression analysis showed that the most important predictors of nicotine dependence in the prisoners were adaptability ($P < 0.001$), temperamental ($P < 0.001$), extraversion ($P < 0.001$), and openness ($P = 0.004$), respectively. The most important predictors of self-control in the prisoners were the personality traits of conscientiousness ($P < 0.001$),

openness (P < 0.001), and temperamental (P < 0.001), respectively.

Discussion

The results showed that there was a significant negative relationship between self-control and nicotine dependence in the prisoners. In other words, an increase in self-control of the respondents resulted in a reduction in their nicotine dependence. Previous research has suggested that there is a significant relationship between self-control, smoking history, history of drug abuse, the intention of drug use, and attitude towards drugs. Adolescents with low self-control are at high risk for substance abuse.[8] Swadi had introduced low self-control as a key factor for substance abuse among young people.[9]

The results showed that the most important predictors of self-control among the prisoners were the personality traits of conscientiousness, openness, and temperamental neuroticism, respectively. The most important predictors of nicotine dependence in prisoners were adaptability, temperamental neuroticism, extroversion, and openness, respectively. The results of the study by Rezvanfard et al.[3] showed that factors such as depression scores, motor impulsivity, risk-seeking, impulsivity sensation seeking, adventure-seeking, experience seeking, uncontrolled behavior, novelty seeking, lack of diligence, and lack of self-direction are predictors of high-dependence on smoking. The study of Sepehrmanesh et al.[13] on 67 male injecting heroin users in prison suggested that 17 (38.2%) had no disorder and 50 (74.6%) had abnormal personality traits based on the Minnesota multiphasic personality inventory (MMPI).

Conclusion

Self-control skills can be trained and there are many experiences in this field which show the effect of self-control on behaviors such as smoking and drug use.[8] Therefore, it is suggested that, by timely trainings, self-control skills can be very effective in preventing smoking and drug abuses. Male prisoners were examined in this study; therefore, generalization of the results should be conducted with caution. It is suggested that further studies be conducted on the relationship between the variables and other groups such as adolescents, youths, and women.

Conflict of Interests

The Authors have no conflict of interest.

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بررسی رابطه ویژگی‌های شخصیتی با خودکنترلی و نشانگان وابستگی به نیکوتین زندانیان مرد شهر کرمان

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مقاله کوتاه

چکیده

مقدمه: مصرف سیگار به عنوان رایج‌ترین و ارزان‌ترین ماده اعتیادآور دارای عوارض جسمی، روانی و اجتماعی می‌باشد. ویژگی‌های شخصیتی و کمبود خودکنترلی به عنوان یک عامل محوری برای سوء مصرف مواد مخدر و دخانیات مطرح شده است. این مطالعه با هدف بررسی رابطه ویژگی‌های شخصیتی با خودکنترلی و نشانگان وابستگی به نیکوتین زندانیان مرد انجام شد.

روش‌ها: تحقیق توصیفی- همبستگی حاضر بر روی ۳۸۴ زندانی مرد شهر کرمان که با روش نمونه‌گیری تصادفی ساده انتخاب شده بودند، صورت گرفت. شرکت کنندگان پرسش‌نامه‌های خودکنترلی و نشانگان وابستگی به نیکوتین و پرسش‌نامه شخصیتی پنج عاملی NEO (NEO-FFI یا NEO five factor personality inventory) را تکمیل کردند.

یافته‌ها: میانگین سن زندانیان ۹/۲۸ ± ۳۵/۳۳ سال بود. بر اساس یافته‌ها، بین خودکنترلی و وابستگی به نیکوتین رابطه معنی‌دار و معکوسی وجود داشت. مهم‌ترین پیش‌بینی کننده خودکنترلی زندانیان به ترتیب ویژگی‌های شخصیتی وظیفه‌شناسی، گشودگی و روان‌آزرده‌خویی (بی‌ثباتی هیجانی) بود. مهم‌ترین پیش‌بینی کننده وابستگی به نیکوتین در زندانیان را نیز به ترتیب ویژگی‌های سازش‌پذیری، روان‌آزرده‌خویی، برون‌گرایی و گشودگی تشکیل می‌داد.

نتیجه‌گیری: ویژگی‌های شخصیتی و خودکنترلی نقش مهمی در وابستگی به نیکوتین دارد، بنابراین با آموزش خودکنترلی می‌توان رفتارهایی مانند سیگار کشیدن و مصرف مواد مخدر را کاهش داد.

واژگان کلیدی: ویژگی‌های شخصیتی، خودکنترلی، وابستگی به نیکوتین، زندانیان

ارجاع: بنی‌اسدی طیبه، جوانمرد زینب، زیوری رحمان محمود، شکوهی مقدم سولماز، ادهمی معصومه. **بررسی رابطه ویژگی‌های شخصیتی با خودکنترلی و نشانگان وابستگی به نیکوتین زندانیان مرد شهر کرمان.** مجله اعتیاد و سلامت ۱۳۹۴؛ ۷ (۲-۱): ۶-۸۲.

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